CLAIMS

What is claimed is:

1. A compound of the formula:

$$R^{2}$$
 N
 N
 N
 X^{1}
 X^{2}

5

and the pharmaceutically acceptable salts, hydrates, and prodrugs thereof, wherein:

 a) R¹ is represented by halogen, (C₁-C₂)alkyl, substituted with one or more halogens, or (C₁-C₂)alkoxy, substituted with one or more halogens,

10

- b) R² is represented by hydrogen or halogen,
- c) X1 and X2 are each independently represented by
 - i) (C₁-C₁₂)alkyl, optionally substituted,
 - ii) (C₂-C₁₂)alkenyl, optionally substituted,
 - iii) (C₂-C₁₂)alkynyl, optionally substituted,
 - iv) (C₃-C₁₀)cycloalkyl, optionally substituted,
 - v) (C₃-C₁₀)cycloalkyl(C₁-C₆)alkyl, in which the alkyl and cycloalkyl moieties may each be optionally substituted,
 - vi) (C₆-C₁₀)aryl, optionally substituted,

20

15

- vii) (C₆-C₁₀)aryl(C₁-C₆)alkyl, in which both the alkyl and aryl moieties may be optionally substituted,
- viii) -(CH₂)_q-CH₂-ZH, in which Z is S or O and q is an integer from 1-11,

25

ix) $-(CH_2)_p-CH_3$, in which Y is O or S, n is an integer from 1 to 4, and p is an integer from 1 to 4,

x) -[CH₂]_m-C(O)R³, in which m is an integer selected from 1 to 8 and R³ is represented by hydrogen, (C₁-C₁₂)alkyl, (C₆-C₁₀)aryl, or (C₆-C₁₀)aryl(C₁-C₆)alkyl, in which both the alkyl and aryl moieties may be optionally substituted,

5

10

15

- xi) -[CH₂]_m-C(O)-O-R⁴, in which m is as defined above and R⁴ is represented by hydrogen, (C₁-C₁₂)alkyl, (C₆-C₁₀)aryl, or (C₈-C₁₀)aryl(C₁-C₆)alkyl, in which the alkyl and aryl moieties may be optionally substituted,
- xii) -[CH₂]m-C(O)-NR⁵R⁶ in which m is as described above, and R⁵ and R⁸ are each independently represented by hydrogen, (C₁-C₁₂)alkyl, (C₆-C₁₀)aryl, or (C₆-C₁₀)aryl(C₁-C₆)alkyl, in which the alkyl and aryl moieties may each be optionally substituted,
- xvii) heteroaryl, optionally substituted,
- xviii) heteroaryl(C₁-C₆)alkyl, in which the heteroaryl and alkyl moieties may each be optionally substituted,
- xix) heterocyclic, optionally substituted, or,
- heterocyclic (C_1-C_6) alkyl, in which the alkyl and heterocyclic moieties may each be optionally substituted.
- A compound according to claim 1 in which R¹ is represented by trifluomethyl.
- 3. A compound according to any one of claims 1- or 2 in which said trifluoromethyl is located at the 4-position of the pyridine ring.
- 20 4. A compound according to anyone of claims 1-3 in which R² is hydrogen.
 - 5. A compound according to anyone of claims 1-4 in which X¹ is (C₁-C12)alkyl and X2 is (C6-C10)aryl(C1-C6)alkyl.
 - 6. A compound according to anyone of claims 1-5 in which X¹ and X² are each (C₁-C₁₂)alkyl
- 7. A compound according to anyone of claims 1-6 in which X¹ is (C₁-C₁₂)alkyl and X 2 is (C3-C10)cycloalkyl(C1-C6)alkyl.
 - A compound according to claim 1 selected from the group consisting of (R)-(+)- 6-[Methyl-(1-Phenyl-ethyl)-amino]-4-trifluoromethyl-nicotinonitrile,

5

- (R)-(+)-2-Chloro-6-[methyl-(1-phenyl-ethyl)-amino]-4-trifluoromethyl-nicotinonitrile, 6-[methyl-(1-phenyl-ethyl)-amino]-4-trifluoromethyl-nicotinonitrile,
- 6-[methyl-(1-phenyl-ethyl)-amino]-4-trifluoromethoxy-nicotinonitrile, 6-[methyl-(1-(4-fluorophenyl)-ethyl)-amino]-4-trifluoromethyl-nicotinonitrile,
- 6-[methyl-(1-(3-hydroxyphenyl)-ethyl)-amino]-4-trifluoromethyl-nicotinonitrile,
- 6-[butyl(1-(3-hydroxyphenyl)-ethyl)-amino]-4-trifluoromethoxynicotinonitrile,
- 10 6-dipropylamino-4-trifluoromethyl-nicotinonitrile,
 - 2-chloro-6-dimethylamino-4-trifluoromethyl-nicotinonitrile,
 - 6-(hexyl-octyl-amino)-4-trifluoromethyl-nicotinonitrile,
 - 6-(sec-butyl-methyl-amino)-4-trifluoromethyl-nicotinonitrile,
 - 6-[butyl-(2-hydroxy-ethyl)-amino]-4-trifluoromethyl-nicotinonitrile,
- 15 6-(butyl-methyl-amino)-4-trifluoromethyl-nicotinonitrile,
 - 6-(benzyl-methyl-amino)-4-trifluoromethyl-nicotinonitrile,
 - 6-(cyclohexyl-propyl-amino)-4-trifluoromethyl-nicotinonitrile,
 - 6-(cyclopropylmethyl-propyl-amino)-4-trifluoromethyl-nicotinonitrile,
 - 6-(sec-butyl-methyl-amino)-2-chloro-4-trifluoromethyl-nicotinonitrile,
- 20 6-Dipropylamino-2-chloro-4-trifluoromethyl-nicotinonitrile,
 - $\hbox{6-(propyl-methyl-amino)-2-chloro-4-trifluoromethyl-nicotinonitrile, and,}\\$
 - 6-(Butyl-methyl-amino)-2-chloro-4-trifluoromethyl-nicotinonitrile.
 - 9. Use of a compound according to anyone of Claims 1-8 as a medicine.
- Use of a compound according to anyone of Claims 1-8 in the
 manufacture of a medicament for inhibiting activation of the androgen receptor.
 - A pharmaceutical composition comprising a compound according to any one of Claims 1-8 in admixture with 1, or more, pharmaceutically acceptable excipients.
- 30 12. A topical pharmaceutical formulation comprising a compound according to anyone of Claims 1-8 in admixture with 1, or more, pharmaceutically acceptable excipients suitable for dermal application.

13. An article of manufacture comprising a compound according to any one of Claims 1-8 packaged for retail distribution which advises a consumer how to utilize the compound to alleviate a condition selected from the group consisting of acne, alopecia, and oily skin.

5

14. Use of a compound according to any one of claims 1-8 in the manufacture of a medicament for alleviating a condition selected from the group consisting of hormone dependent cancers, benign hyperplasia of the prostate, acne, hirsutism, excess sebum, alopecia, premenstrual syndrome, lung cancer, precocious puberty, osteoporosis, hypogonadism, age-related decrease in muscle mass, and anemia.

15

10